App. Ser. No.: 10/600,382 Atty. Dkt. No. ROC920030127US1

PS Ref. No.: 1032.010742 (IBMK30127)

IN THE CLAIMS:

Please amend the claims as follows:

(Currently Amended) A computer implemented method comprising:

creating an annotation corresponding to a first data object identified by a first plurality of identifying parameters that identify a location of the first data object;

creating an index for the first data object, the index comprising one or more index values, each generated based on one or more of the first plurality of identifying parameters that identify a location of the first data object; wherein creating the index for the first data object comprises classifying the first data object based on the first plurality of identifying parameters, selecting a first mapping, from a plurality of mappings, based on the classification of the first data object, and converting the first plurality of identifying parameters to one or more of the index values, as specified in the first mapping;

creating a <u>first</u> record containing the annotation corresponding to the first data object and the index for the first data object: [fand]]

creating an annotation corresponding to a second data object identified by a second plurality of identifying parameters, wherein the first and second sets of identifying parameters comprise different numbers of parameters;

classifying the second data object based on the second plurality of identifying parameters;

selecting a second mapping, from the plurality of mappings, based on the classification of the second data object;

creating an index for the second data object by converting the second plurality of identifying parameters to one or more index values, as specified in the second mapping; and

creating a second record containing the annotation corresponding to the second data object and the index for the second data object; and

storing the first and second records in a storage medium.

(Canceled)

App. Ser. No.: 10/600.382

Atty. Dkt. No. ROC920030127US1 PS Ref. No.: 1032.010742 (IBMK30127)

3. (Original) The method of claim 1, where a number of the index values is greater than a number of the first plurality of identifying parameters.

4-5. (Canceled)

6. (Currently Amended) The method of claim [[5]] 1, wherein the first and second data objects are of different types.

7. (Canceled)

- 8. (Currently Amended) The method of claim [[5]]_1, wherein the first object is a sub-object of the second object and the second set of identifying parameters is a subset of the first plurality of identifying parameters.
- 9. (Currently Amended) The method of claim [[5]] 1, wherein:

the first data object is contained in a text document, wherein the first plurality of identifying parameters includes at least one or more parameters indicating a location and name of the text document; and

the second data object is contained in a database table, wherein the second plurality of identifying parameters includes at least one or more parameters indicating a location and name of the database table.

10. (Currently Amended) A computer implemented method of managing annotations for a plurality of different type data objects, comprising:

receiving a set of parameters identifying an annotated data object, wherein the identifying parameters identify locations of the annotated data object;

selecting, based on the set of identifying parameters, a mapping from a plurality of mappings, each containing a different set of mapping functions; and

creating an index for the annotated data object by mapping the identifying parameters to columns in an index table, as specified by the mapping functions of the selected mapping, wherein the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table.

App. Ser. No.: 10/600,382 Atty. Dkt. No. ROC920030127US1

PS Ref. No.: 1032.010742 (IBMK30127)

11. (Canceled)

- 12. (Currently Amended) The method of claim [[11]] 10, wherein the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column.
- 13. (Original) The method of claim 12, wherein the more than one identifying parameters are mapped to different sets of bytes in the single column.
- 14. (Previously Presented) The method of claim 10, wherein:
- at least one of the mappings comprises mapping functions for mapping parameters identifying annotated data objects associated with a database to the index table columns; and
- at least one of the mappings comprises mapping functions for mapping parameters identifying annotated data objects associated with a text document to the index table columns.
- 15. (Currently Amended) A computer-readable storage medium containing a program which, when executed by a processor, performs operations comprising:

creating an annotation for a data object identified by a plurality of identifying parameters, wherein the identifying parameters identify a location of the data object being annotated;

creating an index for the data object, the index comprising one or more index values, each generated based on one or more of the plurality of identifying parameters; wherein creating the index for the data object comprises selecting, based on the plurality of identifying parameters, a mapping from a plurality of mappings each containing a different set of mapping functions and mapping the plurality of identifying parameters to columns of an index table containing the index, according to the mapping functions of the selected mapping, wherein the mapping functions of at least one of the mappings maps more than one identifying parameter to a single column; and

App. Ser. No.: 10/600.382

Atty. Dkt. No. ROC920030127US1 PS Ref. No.: 1032.010742 (IBMK30127)

creating an annotation record containing the annotation and the index for the data object.

- 16. (Canceled)
- 17. (Currently Amended) The computer-readable <u>storage</u> medium of claim [[16]] <u>15</u>, wherein the mapping functions for each mapping are designed to map a different set of identifying parameters to columns in the index table.
- 18. (Canceled)
- 19. (Currently Amended) The computer-readable <u>storage</u> medium of claim [[18]] <u>15</u>, wherein the more than one identifying parameters are mapped to different sets of bytes in the single column.
- (Currently Amended) A system to manage annotations for different type data objects, comprising:

a processor:

a storage medium containing an annotation database to store annotation records containing annotations for the different type data objects;

an index table to store indexes for the different type data objects, the index table having a plurality of columns, each corresponding to a different value of the indexes;

a plurality of mappings, each containing functions to map a set of identifying parameters for a different type of data object to one or more columns in the index table; and

an annotation component executable by the processor and configured to receive sets of parameters identifying data objects and, for each set of identifying parameters received, select one of the mappings based on the corresponding set of identifying parameters, and create an index for the first data object by mapping the first set of identifying parameters to columns in the index table, as specified by the mapping functions of the selected mapping, and wherein the annotation component is further configured to receive a request for an indication of annotations associated with a

PS Ref. No.: 1032.010742 (IBMK30127)

specified data object identified by a set of parameters, select one of the mappings based on the set of parameters identifying the specified data object, create an index for the specified data object by mapping the set of parameters identifying the specified data object to columns in the index table as specified by the mapping functions of the selected mapping, retrieve annotations, if any, for the specified data object, based on the index for the specified data object, and return the annotations, wherein retrieving annotations comprises retrieving annotations for sub-objects of the specified data object.

- 21 The system of claim 20, wherein at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a database to the index table columns.
- 22. (Original) The system of claim 20, wherein at least one of the mappings comprises mapping functions for mapping parameters identifying data objects associated with a text document to the index table columns.

23-24. (Canceled)

25. (Currently Amended) The system of claim [[24]] 20, wherein retrieving annotations for the specified object comprises:

determining if any indexes in the index table match the index created for the specified data object; and

if so, retrieving one or more annotations for the specified data object from the annotation database.

26-27. (Canceled)

28. (New) A computer implemented method of managing annotations for a plurality of different type data objects, comprising:

App. Ser. No.: 10/600,382 Atty. Dkt. No. ROC920030127US1

PS Ref. No.: 1032.010742 (IBMK30127)

receiving a set of parameters identifying an annotated data object, wherein the identifying parameters identify locations of the annotated data object;

selecting, based on the set of identifying parameters, a mapping from a plurality of mappings, each containing a different set of mapping functions, wherein at least one of the mappings comprises mapping functions for mapping parameters identifying annotated data objects associated with a database to the index table columns, and at least one of the mappings comprises mapping functions for mapping parameters identifying annotated data objects associated with a text document to the index table columns; and

creating an index for the annotated data object by mapping the identifying parameters to columns in an index table, as specified by the mapping functions of the selected mapping.